

CLAIMS

1. An inhalation therapy device (1) comprising

- a nebulizer chamber (2),
- an aerosol generator (3) arranged such as to emit a generated aerosol (4) into said nebulizer chamber (2),
- at least one opening (5) in a wall (6) of said nebulizer chamber (2), and
- at least one valve (7) arranged on said at least one opening (5) in said wall (6) of said nebulizer chamber (2),

wherein said valve comprises:

- a valve seat (22),
- a resilient valve member (40) and
- a valve member positioning means (11),

said valve member positioning means (11) being movable, relative to said valve seat (22) and said valve member (40), out of a first position and into a second position such that in the first position, said valve member (40), in a flow-free state, is positioned on said valve seat (22) by said valve member positioning means (11) and, in the second position, said valve member (40) is spaced apart from said valve seat (22).

2. The inhalation therapy device according to claim 1, characterized in that the spacing apart is achieved by the fixing of the valve member (40).
3. The inhalation therapy device according to one of claims 1 or 2, characterized in that said valve member (40) is attached in the vicinity of or to said valve member positioning means (11).
4. The inhalation therapy device according to one of claims 1 or 2, characterized in that said valve member (40) is attached in the vicinity of or to said valve seat (22).
5. The inhalation therapy device according to one of the preceding claims, characterized in that said valve member (40) is positioned in a pre-tensioned manner on said valve seat (22).
6. The inhalation therapy device according to one of the preceding claims, characterized in that the pre-tension is produced by bending said valve member (40).
7. The inhalation therapy device according to claim 6, characterized in that said valve seat (22) has a curved, rounded or sloping design so as to bend said valve member (40) positioned on said valve seat to produce the pre-tension.
8. The inhalation therapy device according to one of the preceding claims, characterized in that a portion (20) of said wall (6), in which said opening (5) is disposed, is movable relative to said nebulizer chamber (2).
9. The inhalation therapy device according to claim 8, characterized in that the movable portion of said wall (6) is designed as a lid (20) of said nebulizer chamber (2).

10. The inhalation therapy device according to claim 9, characterized in that said lid (20) is attached in a fold-down manner to a stationary part (10) of said nebulizer chamber (2).
11. The inhalation therapy device according to claim 8, 9 or 10, characterized in that said movable portion (20), in particular said lid, is attached in a fold-down manner by means of a film hinge (31).
12. The inhalation therapy device according to claim 11, characterized in that said film hinge (31) is bi-stable.
13. The inhalation therapy device according to one of claims 8 to 12, characterized in that said valve seat (22) is provided on said movable portion (20), in particular said lid, and said valve member positioning means (11) is provided on said stationary part (10) of said nebulizer chamber (2).
14. The inhalation therapy device according to one of claims 8 to 12, characterized in that said valve member positioning means (11) is provided on said movable portion (20), in particular said lid, and said valve seat (22) is provided on said stationary part (10) of said nebulizer chamber (2).
15. The inhalation therapy device according to one of the preceding claims, characterized in that said movable portion (20), in particular on said lid, can be locked in a closed state by means of at least one snap connection (32, 33).
16. The inhalation therapy device according to one of the preceding claims, characterized in that at least two of the parts valve seat (22), valve member (40) and valve

member positioning means (11) are injection-moulded as a single part.

17. The inhalation therapy device according to claim 16, characterized in that the parts valve seat (22), valve member (40) and valve member positioning means (11) are injection-moulded as a single part from different materials.
18. The inhalation therapy device according to one of the preceding claims, characterized in that the parts valve seat (22), valve member (40) and/or valve member positioning means (11) are produced in a two-component injection-moulding process.
19. The inhalation therapy device according to one of the preceding claims, characterized in that said valve member (40) is essentially made of a softer material than said valve seat (22) and/or said valve member positioning means (11).
20. The inhalation therapy device according to one of the preceding claims, characterized in that said valve member (40) is essentially made of silicone rubber or thermoplastic elastomer.
21. The inhalation therapy device according to one of the preceding claims, characterized in that said valve member (40) is essentially made of a harder material than said valve seat (22) and/or said valve member positioning means (11).
22. The inhalation therapy device according to one of the preceding claims, characterized in that said valve seat (22) comprises a circumferential sealing lip (21).

23. The inhalation therapy device according to one of the preceding claims, characterized in that said valve (7) is an inhalation valve or an exhalation valve.

24. An inhalation therapy device (1) comprising

- a nebulizer chamber (2),
- an aerosol generator (3) arranged such as to emit a generated aerosol (4) into said nebulizer chamber (2),
- at least one opening (5) in a wall (6) of said nebulizer chamber (2), and
- at least one valve (7) arranged on said at least one opening (5) in said wall (6) of said nebulizer chamber (2),

wherein said valve comprises:

- a valve seat (22) and
- a resilient valve member (40)

said valve seat (22) being moveable, relative to said valve member (40), out of a first position and into a second position such that in the first position, said valve member (40), in a flow-free state, is positioned on said valve seat (22) and, in the second position, said valve member (40) is spaced apart from said valve seat (22).

25. The inhalation therapy device according to claim 24, characterized in that a portion (20) of said wall (6), in which said opening (5) is disposed, is movable relative to said nebulizer chamber (2).

26. The inhalation therapy device according claim 25, characterized in that the movable portion of said wall (6) is designed as a lid (20) of said nebulizer chamber (2).
27. The inhalation therapy device according to claim 26, characterized in that said lid (20) is attached in a fold-down manner to a stationary part (10) of said nebulizer chamber (2).
28. The inhalation therapy device according to claim 25, 26 or 27, characterized in that said movable portion (20), in particular said lid, is attached in a fold-down manner by means of a film hinge (31).
29. The inhalation therapy device according to claim 28, characterized in that said film hinge (31) is bi-stable.
30. The inhalation therapy device according to one of claims 25 to 29, characterized in that said valve seat (22) is provided on said movable portion (20), in particular said lid, and said valve member (40) is provided on said stationary part (10) of said nebulizer chamber (2).
31. The inhalation therapy device according to one of claims 25 to 29, characterized in that said valve member (40) is provided on said movable portion (20), in particular said lid, and said valve seat (22) is provided on said stationary part (10) of said nebulizer chamber (2).
32. The inhalation therapy device according to one of claims 24 to 31, characterized in that said valve member (40) is positioned in a pre-tensioned manner on said valve seat (22).

33. The inhalation therapy device according to one of claims 24 to 32, characterized in that the pre-tension is produced by bending said valve member (40).
34. The inhalation therapy device according to claim 32 or 33, characterized in that said valve seat (22) has a curved, rounded or sloping design so as to bend said valve member (40) positioned on said valve seat to produce the pre-tension.
35. The inhalation therapy device according to one of claims 24 to 34, characterized in that said movable portion (20), in particular on said lid, can be locked in a closed state by means of at least one snap connection (32, 33).
36. The inhalation therapy device according to one of claims 24 to 35, characterized in that at least two of the parts valve seat (22), valve member (40) and movable portion (20) or stationary part (10) are injection-moulded as a single part.
37. The inhalation therapy device according to one of claims 24 to 35, characterized in that the parts valve seat (22), valve member (40) and movable portion (20) or stationary part (10) are injection-moulded as a single part from different materials.
38. The inhalation therapy device according to one of claims claim 36 or claim 37, characterized in that the parts valve seat (22), valve member (40) and/or movable portion (20) or stationary part (10) are produced in a two-component injection-moulding process.
39. The inhalation therapy device according to one of claims 24 to 38, characterized in that said valve member (40)

is essentially made of a softer material than said valve seat (22).

40. The inhalation therapy device according to one of claims 24 to 39, characterized in that said valve member (40) is essentially made of silicone rubber or thermoplastic elastomer.
41. The inhalation therapy device according to one of claims 24 to 38, characterized in that said valve member (40) is essentially made of a harder material than said valve seat (22).
42. The inhalation therapy device according to one of claims 24 to 41, characterized in that said valve seat (22) includes a circumferential sealing lip (21).
43. The inhalation therapy device according to one of claims 24 to 42, characterized in that said valve (7) is an inhalation valve or an exhalation valve.